

IN THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A pulse wave measuring apparatus for measuring a pulse wave when pressed against a living body, comprising:

a substrate having a pressure sensor on a main surface; and

a protection member having an accommodation space accommodating said substrate;

wherein said protection member is formed of a conductive material, [[and]] a wall surface of said protection member forming said accommodation space is arranged such that an air chamber is interposed between said wall surface and an end surface of said substrate, and said air chamber is open to atmosphere.

2. (Previously Presented) The pulse wave measuring apparatus according to claim 1, wherein said air chamber is provided around an entire perimeter of said substrate.

3. (Canceled)

4. (Previously Presented) The pulse wave measuring apparatus according to claim 1, further comprising

a circuit board processing a signal, and

a flexible line transmitting a signal output from said pressure sensor to said circuit board,

wherein said flexible line includes a fixed portion fixed to said protection member, a connection portion connected to said substrate, and a loose portion located between said fixed portion and said connection portion.

5. (Previously Presented) The pulse wave measuring apparatus according to claim 4, wherein said loosened portion is located inside said air chamber.

6. (Previously Presented) The pulse wave measuring apparatus according to claim 1, further comprising

a circuit board processing a signal, and

a flexible line transmitting a signal output from said pressure sensor to said circuit board,
wherein

said flexible line includes a fixed portion fixed to said protection member and a connection portion connected to said substrate, and

a portion having rigidity different from that of another portion of said flexible line is located between said fixed portion and said connection portion of said flexible line.

7. (Previously Presented) The pulse wave measuring apparatus according to claim 1,
further comprising

a protection film covering said main surface of said substrate and said air chamber, and
an attachment mechanism configured for fastening a peripheral portion of said protection film to an outer circumferential wall of said protection member for attachment.

8. (Previously Presented) The pulse wave measuring apparatus according to claim 7,
wherein

said protection member has a substantially circular outer shape when viewed from a direction orthogonal to said main surface of said substrate, and

said attachment mechanism is an O ring.

9. (Previously Presented) The pulse wave measuring apparatus according to claim 8,
wherein

said outer circumferential wall of said protection member has a concave fitting portion fitting to an inner portion of said O ring on an entire circumference, and

an outer portion of said O ring projects from said outer circumferential wall of said protection member.

10. (Previously Presented) The pulse wave measuring apparatus according to claim 7,
wherein said protection film and said attachment mechanism are integrally formed.

11. (Previously Presented) The pulse wave measuring apparatus according to claim 7,
wherein said protection film has a collar portion in said peripheral portion.

12. (Previously Presented) The pulse wave measuring apparatus according to claim 1, wherein

said protection member includes an inner frame body containing said accommodation space and an outer frame body fitted to said inner frame body so as to enclose an outer wall of said inner frame body,

said outer frame body has a protection film portion covering said main surface of said substrate and said air chamber, and

an outer circumferential wall of said outer frame body has a projected portion on its entire circumference.

13. (Previously Presented) The pulse wave measuring apparatus according to claim 1, further comprising

a circuit board processing a signal, and

a flexible line transmitting a signal output from said pressure sensor to said circuit board, wherein

said protection member includes an inner frame body containing said accommodation space and an outer frame body fitted to said inner frame body so as to enclose an outer wall of said inner frame body, and

said flexible line is inserted between said inner frame body and said outer frame body.

14. (Previously Presented) The pulse wave measuring apparatus according to claim 13, wherein

said outer frame body has an overhanging portion projecting from an inner surface of said outer frame body and facing, at a distance, a perimeter of an accommodation space forming surface of said inner frame body where said accommodation space is formed, and

said flexible line inserted between said inner frame body and said outer frame body is protected by said overhanging portion.

15. (Canceled)

16. (Previously Presented) The pulse wave measuring apparatus according to claim 1, wherein said protection member is electrically connected to a ground potential.

17. (Previously Presented) The pulse wave measuring apparatus according to claim 16, further comprising

a circuit board processing a signal, and

a flexible line transmitting a signal output from said pressure sensor to said circuit board,

wherein said protection member is electrically connected to the ground potential by said flexible line.

18. (Previously Presented) The pulse wave measuring apparatus according to claim 1, wherein said protection member is formed of a metal material or a ceramic material.

19. (Previously Presented) The pulse wave measuring apparatus according to claim 1, wherein said protection member has a plurality of small irregularities on its surface.

20.-29. (Canceled)

30. (New) The pulse wave measuring apparatus according to claim 1, further comprising a protection film covering said main surface of said substrate and said air chamber,

wherein said protection member has a communication hole such that said air chamber is open to atmosphere.